


THE ROLE OF MICRO-ENTERPRISES IN THE FOUR-DIMENSIONAL FRAMEWORK OF WOMEN'S EMPOWERMENT

Jain Jacob ^A, Shanmugam Munuswamy ^B



ARTICLE INFO	ABSTRACT
<p>Article history:</p> <p>Received 07 July 2022</p> <p>Accepted 31 October 2022</p>	<p>Purpose:This paper empirically evaluates the impact of micro-enterprises on women's empowerment. Subsequently, it assesses the mediating role of the performance of micro-enterprises on a four-dimensional model of women's empowerment.</p>
<p>Keywords:</p> <p>Women empowerment; women entrepreneurs; micro-enterprises; Self-help Groups; Enterprise Performance.</p>	<p>Design/ Methodology/ Approach: A quantitative research approach and a cross-sectional research design were adopted in the study. Survey research and purposive sampling technique were used to select 384 individual respondents (women entrepreneurs under the Kudumbashree Mission of Kerala state in India). The data gathered from a structured questionnaire was used for confirmatory factor analysis, model fit evaluation, and making a structural equation model to test the proposed relationship in the four-dimensional model of women's empowerment. The study explicates the relationship between attributes of micro-enterprises and women's empowerment. The field data were analysed using SPSS and AMOS software.</p>
	<p>Findings:Economic development will not happen unless women are empowered. In order to establish an enterprise more successfully and sustainably, women should be taught entrepreneurial skills, technical knowledge, skill training, and marketing skills. The study discovered a strong correlation between the performance of micro-enterprises and women empowerment attributes.</p>
	<p>Originality/value:This study contributes to the literature by identifying how microentrepreneurs emerging from SHGs are achieving societal goals of women empowerment. It adds to the literature by providing a conceptual framework to aid researchers and policymakers in dealing with micro-enterprises and their impact on the empowerment of women in society.</p> <p>Research Limitation/ Implication: Micro enterprises play an important role as they can contribute to women's empowerment by providing opportunities for employment. The study offers researchers and policymakers practical insights on how the multi-facets of micro-enterprises influence different dimensions of women's empowerment. The study aids the government and policymakers in better understanding and implementing strategies to boost women's micro-enterprises, resulting in the overall empowerment of marginalized women.</p> <p>Social Implications:The study aims to create awareness among women about the various prospects for self-help groups, their intricacies, and the performance of micro-enterprises, thereby generating revenue. This, in turn, leads to the general economic development of a society.</p> <p>Doi: https://doi.org/10.26668/businessreview/2022.v7i4.e539</p>

^A Full-time Research Scholar.Department of Management Studies.Highest Academic Qualification MBA, M. Com.B.S. Abdur Rahman Crescent Institute of Science and Technology Vandalur, Chennai 48.

E-mail: jacobjain7@gmail.com Orcid: <https://orcid.org/0000-0002-5161-2379>

^BProfessor & Head.Department of Management Studies. M. Phil., Ph.D. (Finance). Professor & Head.B.S. Abdur Rahman Crescent Institute of Science and Technology Vandalur, Chennai 48.

E-mail: drshan56@gmail.com Orcid: <https://orcid.org/0000-0002-4274-6834>

O PAPEL DAS MICROEMPRESAS NA ESTRUTURA TETRADIMENSIONAL DO EMPODERAMENTO DAS MULHERES

RESUMO

Objetivo: Este documento avalia empiricamente o impacto das microempresas no empoderamento das mulheres. Posteriormente, avalia o papel mediador do desempenho das microempresas em um modelo tetradimensional de empoderamento das mulheres.

Desenho/ Metodologia/ Abordagem: Uma abordagem de pesquisa quantitativa e um desenho de pesquisa transversal foram adotados no estudo. Pesquisa de pesquisa e técnica de amostragem proposital foram utilizadas para selecionar 384 participantes individuais (mulheres empresárias sob a Missão Kudumbashree do estado de Kerala, na Índia). Os dados coletados de um questionário estruturado foram usados para a análise dos fatores de confirmação, avaliação do ajuste do modelo e elaboração de um modelo de equação estrutural para testar a relação proposta no modelo tetradimensional de empoderamento das mulheres. O estudo explica a relação entre os atributos das microempresas e o empoderamento das mulheres. Os dados de campo foram analisados utilizando o software SPSS e AMOS.

Descobertas: O desenvolvimento econômico não acontecerá a menos que as mulheres sejam empoderadas. A fim de estabelecer uma empresa com mais sucesso e sustentabilidade, as mulheres devem ser ensinadas habilidades empresariais, conhecimento técnico, treinamento de habilidades e habilidades de marketing. O estudo descobriu uma forte correlação entre o desempenho das microempresas e os atributos de empoderamento das mulheres.

Originalidade/valor: Este estudo contribui para a literatura ao identificar como os microempresários emergentes de SHGs estão alcançando os objetivos sociais de empoderamento das mulheres. Ele acrescenta à literatura ao fornecer uma estrutura conceitual para ajudar pesquisadores e formuladores de políticas a lidar com microempresas e seu impacto no empoderamento das mulheres na sociedade.

Limitação/implicação da pesquisa: As microempresas desempenham um papel importante, pois podem contribuir para o empoderamento das mulheres, oferecendo oportunidades de emprego. O estudo oferece aos pesquisadores e aos formuladores de políticas percepções práticas sobre como as múltiplas facetas das microempresas influenciam as diferentes dimensões do empoderamento das mulheres. O estudo ajuda o governo e os formuladores de políticas a compreender melhor e implementar estratégias para impulsionar as microempresas femininas, resultando no empoderamento geral das mulheres marginalizadas.

Implicações sociais: O estudo visa criar consciência entre as mulheres sobre as diversas perspectivas de grupos de auto-ajuda, suas complexidades e o desempenho das microempresas, gerando assim receitas. Isto, por sua vez, leva ao desenvolvimento econômico geral de uma sociedade.

Palavras-chave: Empoderamento das Mulheres, Mulheres Empreendedoras, Microempresas, Grupos de Auto-Ajuda, Desempenho Empresarial.

EL PAPEL DE LAS MICROEMPRESAS EN EL MARCO CUATRIDIMENSIONAL DEL EMPODERAMIENTO DE LA MUJER

RESUMEN

Objetivo: Este artículo evalúa empíricamente el impacto de las microempresas en la capacitación de las mujeres. Posteriormente, evalúa el papel mediador del rendimiento de las microempresas en un modelo cuatridimensional de empoderamiento de la mujer.

Diseño/Metodología/Enfoque: En el estudio se adoptó un enfoque de investigación cuantitativa y un diseño de investigación transversal. Se utilizó una investigación por encuesta y una técnica de muestreo intencional para seleccionar a 384 encuestadas individuales (mujeres empresarias en el marco de la Misión Kudumbashree del estado de Kerala en India). Los datos recogidos en un cuestionario estructurado se utilizaron para el análisis factorial confirmatorio, la evaluación del ajuste del modelo y la elaboración de un modelo de ecuaciones estructurales para probar la relación propuesta en el modelo cuatridimensional del empoderamiento de las mujeres. El estudio explica la relación entre los atributos de las microempresas y el empoderamiento de las mujeres. Los datos de campo se analizaron con los programas SPSS y AMOS.

Resultados: El desarrollo económico no se producirá a menos que se empodere a las mujeres. Para crear una empresa con más éxito y de forma sostenible, las mujeres deben recibir conocimientos empresariales, técnicos y de marketing. El estudio descubrió una fuerte correlación entre el rendimiento de las microempresas y los atributos de empoderamiento de las mujeres.

Originalidad/valor: Este estudio contribuye a la literatura al identificar cómo las microempresas que surgen de los grupos de autoayuda logran los objetivos sociales de empoderamiento de las mujeres. Se añade a la literatura proporcionando un marco conceptual para ayudar a los investigadores y a los responsables políticos a tratar las microempresas y su impacto en el empoderamiento de las mujeres en la sociedad.

Limitación/implicación de la investigación: Las microempresas desempeñan un papel importante, ya que pueden contribuir al empoderamiento de las mujeres al ofrecerles oportunidades de empleo. El estudio ofrece a los investigadores y a los responsables políticos una visión práctica de cómo las múltiples facetas de las microempresas influyen en las diferentes dimensiones del empoderamiento de las mujeres. El estudio ayuda al gobierno y a los responsables políticos a comprender mejor y a poner en práctica estrategias para impulsar las microempresas de las mujeres, lo que redundará en el empoderamiento general de las mujeres marginadas.

Implicaciones sociales: El estudio pretende concienciar a las mujeres sobre las diversas perspectivas de los grupos de autoayuda, sus entresijos y el rendimiento de las microempresas, generando así ingresos. Esto, a su vez, conduce al desarrollo económico general de una sociedad.

Palabras clave: Empoderamiento de las mujeres, mujeres empresarias, microempresas, grupos de autoayuda, rendimiento de las empresas.

INTRODUCTION

Women's participation and empowerment are recognized as critical long-term tools for economic advancement (Pharm & Sritharan, 2013), and entrepreneurship is widely regarded as the most suitable option for accomplishing this goal (Muhammad et al., 2021) (Khursheed et al., 2021). In any country, only economic development that is fair and balanced can be called holistic and long-term sustainable. In addition to other positive outcomes, women's economic empowerment increases productivity, diversifies the economy, and improves income equality (IMF, 2018). Women's entrepreneurship development is required to empower women and assist them in improving their financial circumstances. Women Small Medium Enterprises (SMEs) improve their financial potential by encouraging them to start and run their own businesses (Anselme & Qamruzzaman, 2022).

Micro, small, and medium enterprises (MSME) play a significant role as they can contribute to women's empowerment by providing opportunities for employment. There are approximately 14 million SMEs in India, with women owning less than 5% of them. Of such SMEs, 60% are small businesses, 15% are large manufacturers, and the rest are micro-businesses (Choudhury et al 2020). By establishing self-help group-managed micro-enterprises, women can become self-employed and empowered. It gives them a sense of accomplishment as well as an opportunity to prove their worth (Sebastian & P.K, 2020). In developing nations, micro-enterprises constitute most of the small business sector. These micro entrepreneurs operate microbusinesses not out of choice, but out of necessity. It is a major force in improving women's economic conditions by providing jobs (Dutta, 2021) to both highly qualified and less qualified women for their overall development, as well as recognizing their inherent ability to work in non-agricultural sectors when agricultural employment is stagnant. Micro-enterprises add value to a country's economy by generating jobs, increasing purchasing power, lowering costs, and incorporating business convenience (Arul Paramanandam & Packirisamy, 2015).

Government policy, competition, globalization, market shifts, technology, and consumer requirements have all influenced changes in the post-liberalized economy on women-run micro-enterprises. As a result, micro-enterprises have created enormous potential for women entrepreneurs both within and outside of the economy (Khamurduddin, Sk and Kalvakolanu, 2012).

The Grameen Bank of Bangladesh, established by Mohamed Yunus, is where SHG (Self- Help Group) first emerged. SHGs began and were established in 1975. SHG was started in India by the National Bank for Agriculture and Rural Development (NABARD) between 1986 and 1987. SHGs have laid the foundation for the economic independence of rural women. SHGs were established to advance and empower society's underprivileged groups, particularly women (Nayak & Panigrahi, 2020). SHG participants engage in small-scale business and the extraordinary rise in credit and thrift emphasises the opportunity for the poor to build savings and assets through a collective strategy. As a result, the SHG model serves as a group with advocacy, training, savings, and credit functions, resulting in the development of micro-enterprises and economic empowerment (Arun et al., 2006). In essence, Kudumbashree is a community network that spans the entire state of Kerala. Neighbour Hood Groups (NHGs) are the primary level units, followed by Area Development Societies (ADS) at the ward level and Community Development Societies (CDS) at the local government level. It is arguably one of the world's largest women's networks. The structure, functions, and administration of Kudumbashree network have close ties to the local government but it retain the leverage of an NGO. 25% of the anti-poverty sub-plans is allocated to women initiated projects through the establishment of micro-enterprises and minimum needs assets as the Kudumbashree network is linked to local government establishments (John, 2009). Kudumbashree has thus far covered 2,94,436 NHGs affiliated with 19,489 ADSs and 1064 CDSs with a total membership of 45,85,677 women in 2021(*Kudumbashree Mission Report, 2022*). Membership in Kudumbashree is open to all adult women, with a limit of one membership per family. In 2011, the Government of India's Ministry of Rural Development (MoRD) designated Kudumbashree as the State Rural Livelihoods Mission (SRLM) under the National Rural Livelihoods Mission (NRLM).

Empowerment has been increased while resources have been made available to women, enabling them to provide better care for their families, particularly children (Mayoux, 2001); (Kabeer, 2005); (Hulme et al., 1997); (Yadav & Verma, 2015). While feminist scholars agree that increased access to financial services opens more opportunities for women and promotes their empowerment (Yadav & Verma, 2015). Numerous researchers have discovered that

microfinance is essential for the empowerment of women. In 2009, Bali Swain (Swain & Wallentin, 2009) discovered that joining self-help groups had a positive effect on women's empowerment through financial services and training. Microfinance has been viewed as a tool for empowering women economically and fostering development (Yadav & Verma, 2015).

The purpose of this study is to evaluate women's empowerment through entrepreneurial activities in the Indian context and to assess the mediating role of enterprise performance on women's empowerment. Individual characteristics that determine participation in SHG-based micro-enterprises under the Kudumbashree Mission in Kerala State, India (popularly known as the "*Kerala Model*" of development), are examined using primary survey data. The subsequent research seeks to comprehend the effect of participation in micro-enterprise activities on various facets of women's empowerment.

LITERATURE REVIEW

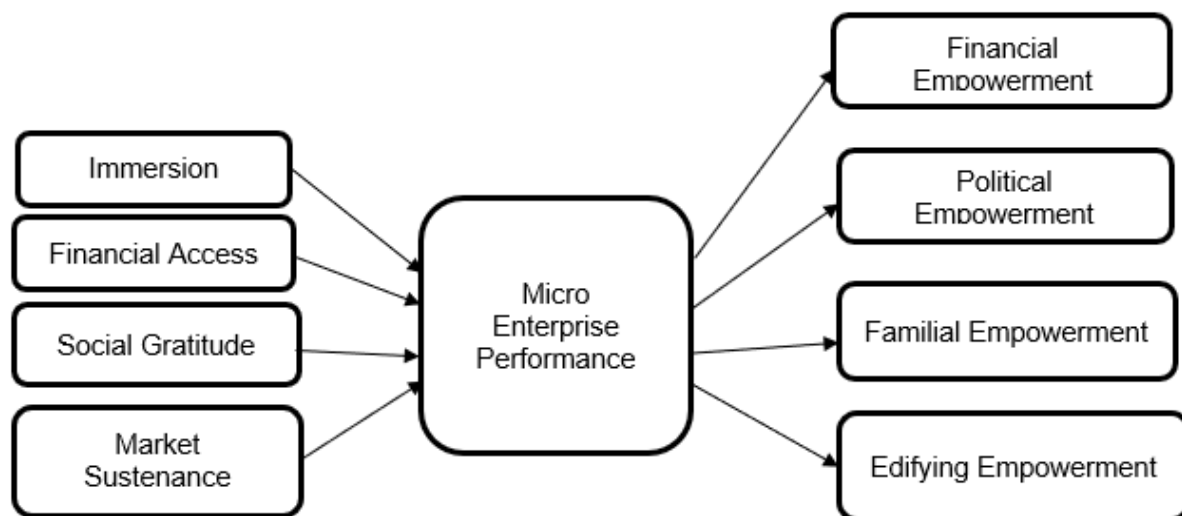
The empowerment of women has constantly been a challenge, especially for those prevailing in poverty. The solution to the problems for impoverished women is to start micro-level firms with the joint effort of self-help groups (Imran, M. and Aiman, 2019); (Alemu et al., 2018); (Khobarkar et al., 2016); (Duflo, 2012). Micro-enterprise is a powerful tool for achieving women empowerment in a balanced way. It helps to generate employment (Subbarayudu, C. and Rao, 2021); (Brody et al., 2017) for a large number of people within their own social structure (Murugesan, 2014). Women's empowerment is bolstered through micro entrepreneurship, which eliminates gender disparities (Agarwal, 2018). It not only improves national efficiency and creates jobs (Imran, M. and Aiman, 2019), but also helps in economic independence and improves the personal and social capacities of poor women (Sujisha, A. S. and Biju, 2019); (Carmichael & Mazonde, 2016); (Husain et al., 2014).

Women's entrepreneurship development is essential to empower and assist women in improving their financial circumstances (Gracelin, J. and Beulah, 2016). Empowerment of women through micro-enterprises is considered an important aspect to create friction between small-scale and large-scale business enterprises. The establishment of women-run micro-firms is also critical for the family's financial well-being (Dutta, 2021), as well as the mental and physical well-being of disadvantaged women (Alemu et al., 2018). Micro-enterprises are acknowledged as a critical component that contributes greatly to job creation, poverty alleviation, and women's empowerment (Kondal, 2014); (Kabeer, 2005). The form of self-help group has laid the foundation to address the bottlenecks of women empowerment (Harika et al., 2020). Self-help groups linked micro-enterprises provides employment and income safety to

women entrepreneurs (Brody et al., 2017). A self-help group is a suitable remedy for economically and socially backward women, to bring out their talents, skills, and capabilities to enhance their participation in micro-business ventures and empowerment (Brody et al., 2017); (Alemu et al., 2018). Women's self-help groups help them improve their self-confidence, enhanced their position, in family functions, and so on (Hussain et al., 2015). In India, the rise of women entrepreneurs and their contributions in the form of micro-enterprises is gradually increasing (Gupta et al., 2021). As women gain necessary skills to produce a product, manage funds, and organize the operations of micro-enterprises, their position in the family and society improves (Rajapriya, 2008). They have a wide range of opportunities to sell their products in a variety of markets (Shireesha, 2019) to better understanding of market dynamics, which equip them to deal with changing market behaviour and competition (Nichlavose & Jose, 2017).

While studies on women empowerment and micro-enterprises were available in other countries, only limited research were found in India. Further, no studies have been conducted to examine the impact of micro-enterprises on rural women empowerment using multi-facets of micro-enterprises such as immersion (level of participation), financial access, market sustenance, and social gratitude (social capital). The purpose of this study is to assess the role of multi-facets of self-help group-based micro-enterprises in the empowerment of rural women as well as the mediating role of enterprise performance in women's empowerment in the Indian context. The findings have significant policy ramifications for the growth and strategic direction of the SHG-initiated microenterprise programmes in the Indian context. A conceptual framework has been developed to achieve the goals of the study. This framework is shown in *Figure1.1*

Figure1.1: Conceptual Framework



Source: Authors

SAMPLING DESIGN AND STUDY'S METHODOLOGY

Survey of individual members of group-owned micro-enterprises under the Kudumbashree Mission in the state of Kerala was used for collection of data. A total sample of 384 members from micro-enterprise members was chosen to assess the impact of micro-enterprises on women's empowerment. The technique of purposive sampling is used to collect samples from the members of micro-enterprises. The primary criterion for sample selection is that members should have completed a minimum of five years of enterprise activities, assuming that the impact can be studied effectively due to the members and that enterprises would have been relatively well stabilized during this period. The sample size is determined using Cochran's (1977) formula, yielding 384 samples ($n_0 = z^2pq/e^2 = 384$; 5 percent margin of error) (Cochran, 1977).

To examine the stimulus for the success of micro-enterprises performance and its impact on women's empowerment, the required data was collected from the selected members of group-owned micro-enterprises using a structured questionnaire. The questionnaire is formulated into two parts. To start with socio-demographic background like age, academic qualification, marital status, monthly income, family size, and experience in the business is evaluated. The second part seeks the precursors and consequences of women self-help group-owned micro-enterprises. Owing to diverse nature of demographic background, structured questionnaire is used to enhance data precision efficiency and reduce response bias. The content validity and face validity of the questionnaire tested in prior with field experts, policymakers, and academicians before the final survey. The questionnaire structure, wording, meaning and scaling is intensively debated with the field experts.

Necessary instructions and clarification of questions helped to get full responses with due diligence. Further, confirmatory factor analysis and structural equation modelling are performed using the AMOS 22.0 software. The path or regression coefficients between the components are presented in structural equation modelling to authorise the relationship between theoretical constructs. In this procedure, data analysis is divided into two parts. First, confirmatory factor analysis is used to assess overall measurement quality, as well as the instrument's reliability and validity. Subsequently, structural modelling is utilised to observe if the model matches the results of the proposed theoretical model. TLI, CFI, NFI, RFI, AGFI, IFI, GFI, RMSEA and CMIN/DF are employed to assess the model fit. Additionally, the independent link between the precursors of micro-enterprises is being investigated.

The SEM analysis mainly seeks to address the following two main hypotheses

Hypotheses 1: Immersion, financial access, market sustenance, and social gratitude are the basis for micro-enterprises conquest.

Hypothesis 2: Microenterprises conquest is the basis for financial, political, edifying, and family empowerment of women.

Two main hypotheses about the relationship between antecedents and the performance of micro-enterprises and women empowerment attributes are tested using the structural equation modelling.

RESULTS AND DISCUSSIONS

Socio-demographic Background Analysis

The socio-demographic background of women entrepreneurs who participated in the survey are described in *Table1.1*

Table1.1: Socio-demographic Background

S. No	Socio-demographic Background	Variables	Frequency
1.	Age	< 30 yrs	17.45%
		30 – 50 yrs	40.89%
		> 50 yrs	41.67%
2.	Marital Status	Married	72.40%
		Unmarried	27.60%
3.	Monthly Income	< Rs.25,000	33.07%
		Rs.25,000 - 50,000	35.68%
		> Rs.50,000	31.25%
4.	Academic Qualification	School Education	28.91%
		UG/ Diploma	42.45%
		PG	28.65%
5.	Experience in Business	Below 3 yrs	20.57%
		3 – 7 yrs	48.44%
		> 7 yrs	30.99%
6.	Family Size	2 members	26.82%
		3 – 5 members	39.06%
		> 5 members	34.11%

Source: Survey data

Majority of the respondents (83%) were aged 30 years or more, which correlates with the fact that about 72% of the respondents were married. This would point out the fact that self-help groups contribute to the overall economic well-being of the families to which the respondents belong. Two thirds of the respondents earned at least Rs. 25000 per month. About 71% of the respondents had educational qualifications beyond the secondary school level, which confirms the generally high literacy levels in the state. Most of the respondents (66%) belonged to small families with five or less members.

Performance of Micro-enterprises and their influence on Women Empowerment

Structural equation modelling (SEM) is used to test the relationship between observed and latent variables. It is a suitable statistical technique for assessing the causal relationship with the selected variables. Confirmatory factor analysis is executed to develop a measurement model, which aims to determine perfect fit of the model with data. At foremost, data reliability is estimated, then convergent validity is assessed. Reliability is acknowledged as the internal consistency of each factor that is used to evaluate latent construct variables (Fornell & Larcker, 1981). The variables such as immersion (IMRS), financial access (FLAS), market sustenance (MRST), social gratitude (SLGT), micro-enterprise performance (MEP), financial empowerment (FLEM), political empowerment (PLEM), edifying empowerment (EFEM), and family empowerment (FYEM) used to perform Pearson correlation coefficient matrix. Its results are depicted in *Table1. 2*.

Table1. 2: Pearson Correlation Coefficient Matrix

Factors	IMRS	FLAS	MRST	SLGT	MEP	FLEM	PLEM	EFEM	FYEM
IMRS	1	.661**	.691**	.575**	.762**	.762**	.547**	.508**	.708**
FLAS	.661**	1	.789**	.462**	.634**	.646**	.458**	.491**	.663**
MRST	.691**	.789**	1	.540**	.661**	.705**	.476**	.478**	.647**
SLGT	.575**	.462**	.540**	1	.553**	.577**	.411**	.421**	.470**
MEP	.762**	.634**	.661**	.553**	1	.735**	.523**	.491**	.688**
FLEM	.762**	.646**	.705**	.577**	.735**	1	.464**	.488**	.677**
PLEM	.547**	.458**	.476**	.411**	.523**	.464**	1	.653**	.431**
EFEM	.508**	.491**	.478**	.421**	.491**	.488**	.653**	1	.431**
FYEM	.708**	.663**	.647**	.470**	.688**	.677**	.431**	.431**	1

Source: Survey data

** Significant at 1% level.

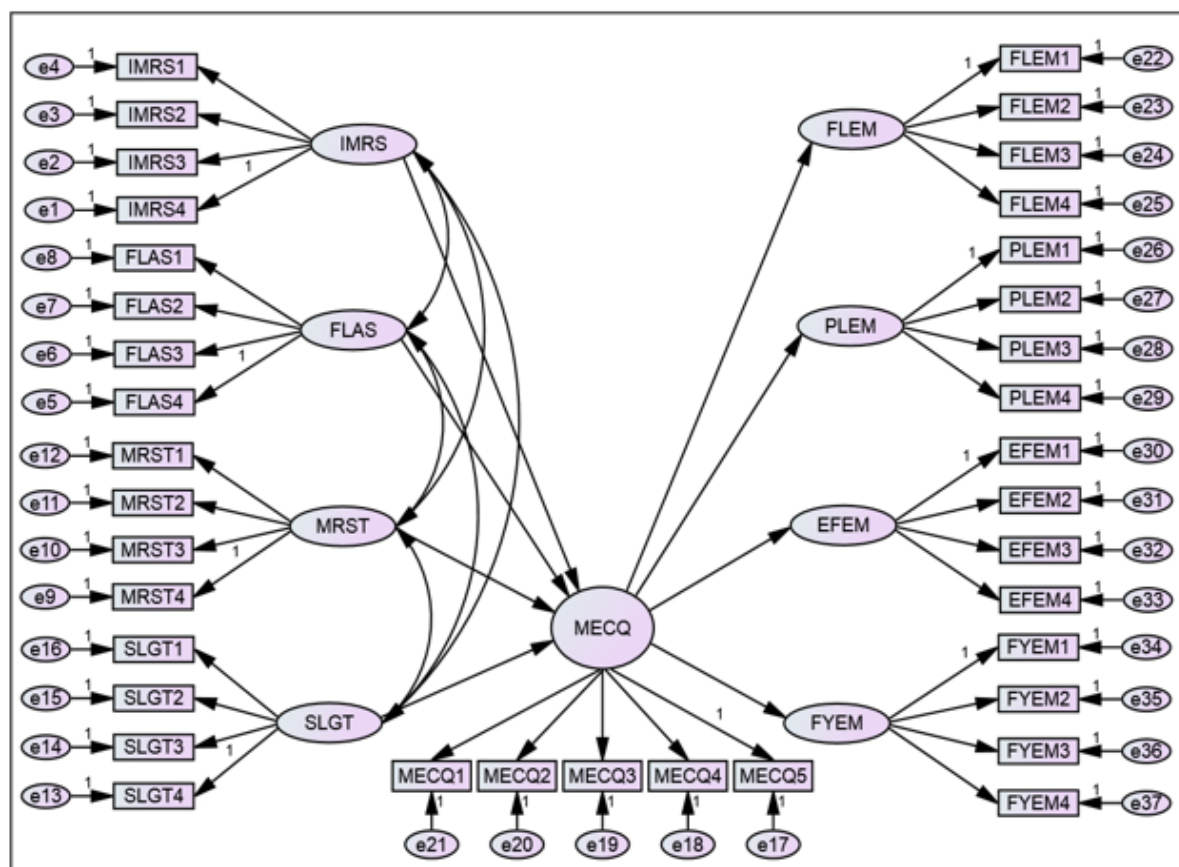
Table1. 2 reveals that there is a perfect positive correlation found among the variables, as its values are found between 0.411 to 0.762. The sensible values assure that there is no scope of multi-collinearity issues among the constructs.

Measurement Model

SEM is used to determine the impact of both exogenous and endogenous factors on the precursors and consequences of women-led micro-enterprises. As a result, it creates a path for the simultaneous investigation of the entire model in search of various potential linkages. A

two-step test is carried out in this manner. The latent components of a measurement model are examined first, followed by the hypothetical relationship amongst all variables in a structural equation model. Nine latent constructs are described from 37 observable variables, based on assumptions proposed in the theoretical development section. In this method, a measurement model for examining the latent constructs' reliability and validity is tested. Consequently, the results are shown in *Figure1. 2*

Figure1. 2: Measurement Model



Source: Survey data

Table1. 3: Results of Confirmatory Factor Analysis

Latent Constructs	Variables	Factor Loadings	Cronbach Alpha	Composite Reliability	Average Variance Extracted
Immersion	IMRS1	0.881	0.887	0.884	0.775
	IMRS2	0.892			
	IMRS3	0.865			
	IMRS4	0.854			
Financial access	FLAS1	0.916	0.911	0.912	0.762
	FLAS2	0.851			
	FLAS3	0.863			
	FLAS4	0.868			
Market sustenance	MRST1	0.912	0.895	0.901	0.753
	MRST2	0.866			
	MRST3	0.872			

	MRST4	0.853			
Social gratitude	SLGT1	0.913			
	SLGT2	0.836	0.905	0.902	0.757
	SLGT3	0.799			
	SLGT4	0.787			
Micro-enterprise performance	MEP1	0.885			
	MEP2	0.859	0.921	0.916	0.768
	MEP3	0.843			
	MEP4	0.838			
	MEP5	0.829			
Financial empowerment	FLEM1	0.834			
	FLEM2	0.887	0.915	0.922	0.688
	FLEM3	0.833			
	FLEM4	0.758			
Political empowerment	PLEM1	0.825			
	PLEM2	0.821	0.904	0.899	0.704
	PLEM3	0.836			
	PLEM4	0.855			
Edifying empowerment	EFEM1	0.844			
	EFEM2	0.810	0.898	0.892	0.711
	EFEM3	0.803			
	EFEM4	0.836			
Family empowerment	FYEM1	0.868			
	FYEM2	0.787	0.917	0.908	0.724
	FYEM3	0.772			
	FYEM4	0.791			

Source: Survey data

Table 1. 3 shows that latent constructs have factor loading values ranging from 0.758 to 0.916, indicating high support for each construct's validity. The average variance retrieved for all precursors and consequences of women-led micro- firms exceeds the 0.50 threshold. Similarly, the composite reliability coefficient values for all latent constructs are found to be greater than 0.60, indicating that the model has a high internal reliability.

Table1. 4: CFA Model Fit

Chi-Square	Df	Sig.	CMIN/df	CFI	RMSEA
1522.362	620	0.000	2.455	0.917	0.057

Source: Survey data

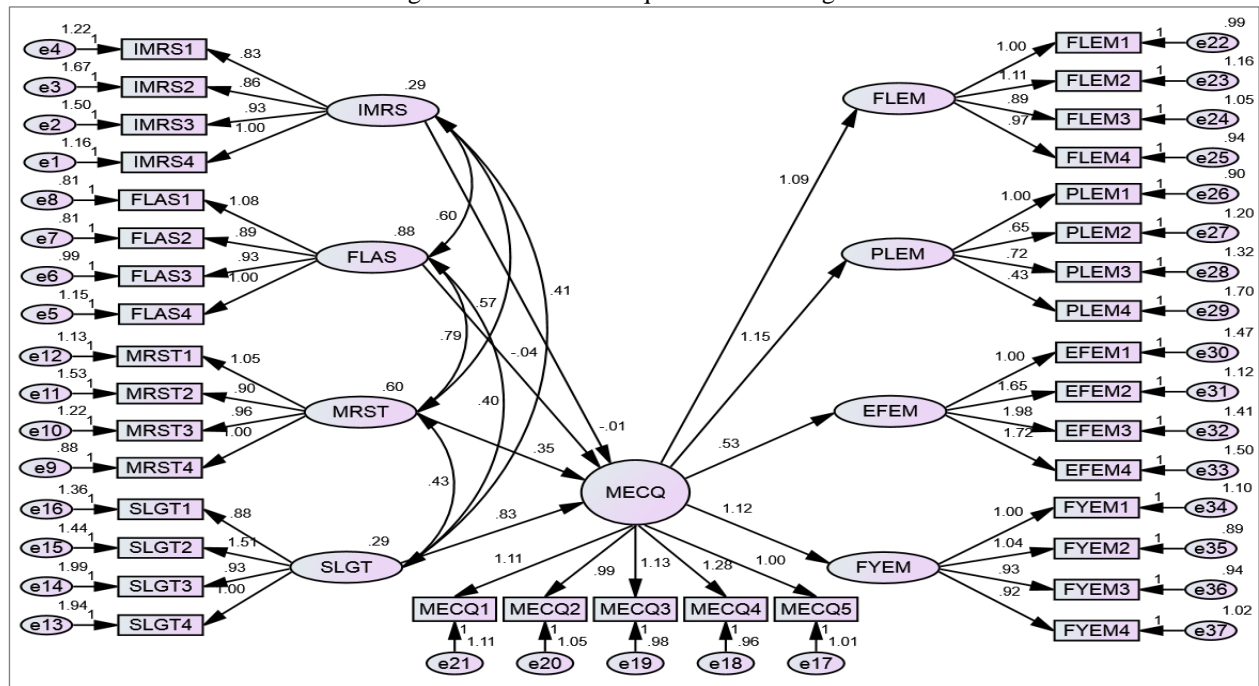
Table1. 4 shows that practically all the requirements for authorizing a first-order measurement model have been met. The confirmatory factor analysis results of the measurement model show that the chi-square value is 1522.362, with $p = 0.000$, CFI = 0.917, and RMSEA = 0.057. As a result, the goodness of fit test shows that the model is a perfect fit. The model is tested after each variable's validity and reliability have been determined.

Structural Equation Modelling

The proposed hypotheses are tested to observe if the proposed measurement model is stable with the data. Figure 3 depicts the possible relationship between the various constructs.

Totally, eleven hypotheses are constructed in the hypothetical association construct, with a path significance threshold of 0.05. Following that, the motive of the study is to confirm that there is significant and positive association among the variables.

Figure1. 3: Structural Equation Modelling



Source: Survey data

Figure1. 3 indicates that all path values in the model are significant at $p < 0.05$. The study looked at the models depicted in the chart; it used to create a flow chart for precursors and consequences of women led micro-enterprises. In general, in structural equation modelling, estimating model fit using the chi-square test is difficult because it is dependent on sample size. Different types of fit indices have been estimated based on these constraints, and it denotes independent sample size. Table 5 show the goodness of fit.

Table 1. 5: Goodness of Fit Test

S. No	Goodness of Fit Indices	Statistics	Threshold Value
1.	CMIN/ DF	2.377	<3
2.	Goodness Of Fit Index (GFI)	0.914	>0.9
3.	Adjusted Goodness of Fit Index (AGFI)	0.902	>0.9
4.	Normed -Fit Index (NFI)	0.913	>0.9
5.	Relative Fit Index (RFI)	0.924	>0.9
6.	Incremental Fit Index (IFI)	0.923	>0.9
7.	Tucker- Lewis Index (TLI)	0.919	>0.9
8.	Comparative Fit Index (CFI)	0.912	>0.9
9.	Root Mean Square Error of Approximation (RMSEA)	0.054	<0.06

Source: Survey data

Table 1. 5 presents the goodness of fit test, and it has perfect fit with the data. CMIN/df values are safely less than 3 (Steiger, 2007). The computed values of GFI (0.914), AGFI (0.902), NFI (0.913), RFI (0.924), IFI (0.923), TLI (0.919), and CFI (0.912) are higher than the threshold value of 0.9. Moreover, the RMSEA value is 0.054, it is lower than the threshold value of 0.06. SEM has close association with goodness of fit indices; therefore, consistency is found on all the suggested values. Data reliability is also confirmed. The extensive relationship is tested with the help of hypotheses, and it is presented in table 6.

Table1. 6: Testing of Hypothesis

Hypothesized Path Relationship		Estimate	S.E.	C.R.	P-Value
Micro-enterprise performance	<--- Immersion	-.006	.049	-2.718	0.011
	<--- Financial Access	-.038	.114	-2.733	0.008
	<--- Market Sustenance	.347	.126	2.751	.006
	<--- Social Gratitude	.828	.170	4.870	***
Financial Empowerment	<---	1.086	.113	9.615	***
Political Empowerment	<---	1.149	.114	10.046	***
Edifying Empowerment	<---	.529	.101	5.221	***
Family Empowerment	<---	1.122	.118	9.519	***

Source: Survey data

*** Significant at 1% level

Table1. 6 depicts the relationships between variables that are tested using hypothesis. The coefficient value of immersion (-0.006), financial access (-0.038), market sustenance (0.347) and social gratitude (0.828) for micro-enterprise performance. It has negative and significant relationship with immersion (significant at 5% level) and financial access, but it has positive and significant relationship with market sustenance and social gratitude. The results are significant at 1% level and hypothesis (H_1) validated. Micro-enterprise performance has positive and significant relationship with its antecedents. Therefore, micro-enterprise performance is intensively supporting for women empowerment. The results are statistically significant at 1% level, and hypothesis (H_2) is supported. The findings confirmed that antecedents such as immersion, financial access, market sustenance and social gratitude are the basis for micro-enterprise performance. Similarly, micro-enterprise performance is the basis for financial, political, edifying and family empowerment of women.

The quantum of relationship among independent factors in women self-help group-led micro-enterprises is also examined. The test of estimates of independent factors are described in Table1.7.

Table 7: Table1.7 Estimates of Independent Factors

Independent Variables			Estimate	S.E.	C.R.	Sig.
Immersion	<-->	Financial Access	.604	.073	8.251	***
Immersion	<-->	Market Sustenance	.565	.066	8.583	***
Immersion	<-->	Social Gratitude	.411	.068	6.039	***
Financial Access	<-->	Market Sustenance	.794	.088	9.057	***
Financial Access	<-->	Social Gratitude	.403	.072	5.642	***
Market Sustenance	<-->	Social Gratitude	.430	.071	6.047	***

Source: Survey data

Table1.7 shows that immersion has 60% impact on women's financial access, 57% impact on market sustenance, and 41% impact on social gratitude, and its results are significant at the 1% level. Immersion guides women entrepreneurs how to participate in micro enterprise operations, which has led to greater financial autonomy, market nourishment, and social recognition. Financial access has 79% impact on market sustenance and 40% impact on social gratitude, and its results are significant at the 1% level. Better financial availability for women-led micro businesses ensures market viability and social gratitude for female entrepreneurs. Market sustenance has 43% impact on social gratitude, which is statistically significant at the 1% level. Market sustainability makes women entrepreneurs better recognition from the society. Precursors such as immersion, financial access, market sustainability, and social gratitude are intertwined and serve as the foundation for micro-enterprise performance.

The results confirmed that antecedents (such as immersion, financial access, market sustenance, and social gratitude) have a positive and significant impact on the performance of micro-enterprises and that it results in a strong relationship between the performance of the micro-enterprises and women's empowerment attributes. economic empowerment of participants by bringing in employment opportunities, increased income, job security, and improved entrepreneurial skills. Besides, social empowerment is reflected in positive changes in communication skills, self-esteem, and social relationships. Greater involvement in family decision-making results in greater familial empowerment. Finally, political empowerment among members is attained in the form of higher political participation and better community mobilization.

CONCLUSION

Women, in both personal and professional life have to conquer several criticisms, and also encumbers their empowerment. The establishment of micro-enterprises helps women to equip with relevant quality and empowerment in all respects. Women participation in micro-enterprises have played immense success in life of women. Economic participation of women

is crucial not only for reducing the disproportionate levels of poverty among women, but also for increasing household income and fostering economic growth. Societies need to see women less as passive recipients of help and more as dynamic promoters of social transformation. The empowerment of women is one of the central issues in the process of development of countries all over the world. Women self-help groups are the focus of various development interventions in India. Women, individually, face many difficulties to empower financially and politically, both in family and society. Participation in micro business ventures through self-help group is a boon to avail employment, finance, and autonomy especially for women. Government should develop conducive plans, policies, and subsidies towards the establishment of micro-enterprises among deprived women segments. It is that suggested the women in backward areas, hilly places, deprived segment in urban areas should be paid more attention to strengthen their standard of living. It helps them to uplift their children able to easily attain balanced nutrition food, higher education, a healthier marriage, and awareness against women harassment. Timely assistance can enhance their ability to operate, ability to market, ability to manage their micro-enterprises, which will ultimately boost empowerment in all respects.

The study significantly contributes to the body of knowledge by developing multi-facets of micro-enterprises as a measure of evaluating enterprise participation instead of considering membership alone as the proxy for evaluation of participation in enterprises. In addition, it develops a contextually relevant and comprehensive measure of women's empowerment by creating items that capture its four key dimensions: economic, social, familial, and political. This metric may be useful for researchers working on women's empowerment in developing nations (especially in South Asian countries). This study provides government and non-government organisations working to empower and uplift women in developing regions with invaluable insights with the adoption of the Kudumbashree model (Kerala model) of women empowerment.

REFERENCES

- Agarwal, R. (2018). Role of Entrepreneurship in Promoting Women Empowerment in Northeastern Region of India. *Amity Journal of Entrepreneurship*, 3(2), 25–41.
- Alemu, S. H., Van Kempen, L., & Ruben, R. (2018). Women empowerment through self-help groups: The bittersweet fruits of collective apple cultivation in highland Ethiopia. *Journal of Human Development and Capabilities*, 19(3), 308–330.
- Anselme, A., & Qamruzzaman, M. (2022). Do access to finance, technical know-how and financial literacy offer Women empowerment through Women's entrepreneurial Sustainability? *Frontiers in Psychology*, 5889. <https://doi.org/10.3389/fpsyg.2021.776844>.

- Arul Paramanandam, D., & Packirisamy, P. (2015). An empirical study on the impact of micro enterprises on women empowerment. *Journal of Enterprising Communities*, 9(4), 298–314. <https://doi.org/10.1108/JEC-08-2014-0017>
- Arun, S., Heeks, R., & Morgan, S. (2006). Improved livelihoods and empowerment for poor women through IT sector intervention. *Cinderella or Cyberella*, 141–164.
- Batliwala, S. (2007). Putting power back into empowerment. *Democracy*, 50, 3.
- Brody, C., Hoop, T. de, Vojtkova, M., Warnock, R., Dunbar, M., Murthy, P., & Dworkin, S. L. (2017). Can self-help group programs improve women's empowerment? A systematic review. *Journal of Development Effectiveness*, 9(1), 15–40.
- Carmichael, T., & Mazonde, N. B. (2016). The influence of culture on female entrepreneurs in Zimbabwe. *The Southern African Journal of Entrepreneurship and Small Business Management*, 8(1), 1–10.
- Choudhury M. R; S. Hussain; R. K. Nath. (2020). WOMEN EMPOWERMENT THROUGH MICRO ENTERPRISES IN KARIMGANJ DISTRICT OF ASSAM. *International Journal of Recent Scientific Research*, 11(7), 39166–39168. <https://doi.org/10.24327/IJRSR>
- Cochran, W. G. (1977). *Sampling techniques*. John Wiley & Sons.
- Duflo, E. (2012). Women Empowerment and Economic Development in Nepal. 50, 1051–1079.
- Dutta, A. K. (2021). A Study Of Self - Help Group (SHG) based Micro Enterprises in Sikkim. *International Journal Of Advance Research And Innovative Ideas In Education*, 7(4). <https://doi.org/16.0415/IJARIIE-15200>
- Fornell, C., & Larcker, D. F. (1981). *Structural equation models with unobservable variables and measurement error: Algebra and statistics*. Sage Publications Sage CA: Los Angeles, CA.
- Goldman, M. J., & Little, J. S. (2015). Innovative grassroots NGOS and the complex processes of women's empowerment: An empirical investigation from Northern Tanzania. *World Development*, 66, 762–777.
- Gracelin, J. and Beulah, A. (2016). A study on problems faced by women entrepreneurs in Tuticorin District. *SSRG International Journal of Economics and Management Studies*, 34(5), 128–131.
- Gupta, S.; Jain, S. K. and Singh, V. (2021). Determinants influencing the growth of MSMEs women entrepreneurs in India. *Gorteria Journal*, 34(5), 198–205.
- Harika, K., Raviteja, K., & Nagaraju, V. (2020). Women empowerment through self-help groups (SHGs) in three dimensions: An empirical study of rural Andhra Pradesh. *International Journal of Social Science*, 9(4), 263–271.
- Hulme, D., Mosley, P., Wood, G. D., & Sharif, I. A. (1997). *Finance for the poor or poorest? Financial innovation, poverty and vulnerability*. In *Who needs credit? Poverty and finance in Bangladesh*. Zed Books.

- Husain, Z., Mukerjee, D., & Dutta, M. (2014). Self-help groups and empowerment of women: self-selection, or actual benefits? *Journal of International Development*, 26(4), 422–437.
- Hussain, J., Ismail, K., & Akhtar, C. S. (2015). *Arabian Journal of Business and Market Orientation and Organizational Performance : Case of Pakistani*. *Arabian Journal of Business and Management Review*, 5(5), 125–136.
- IMF. (2018). *Pursuing Women's Economic Empowerment*.
- Imran, M. and Aiman, U. (2019). Women entrepreneurship and current scenario in India: an overview. *Journal of Emerging Technologies and Innovative Research*, 6(6), 27–34.
- Kabeer, N. (1999). Resources , Agency , Achievements : Re - ections on the Measurement of Women ' s Empowerment. 30(May), 435–464.
- Kabeer, N. (2005). Gender Equality and Women's empowerment. *Gender and Development* Vol., 13(1), 13–24. <https://doi.org/10.11126/stanford/9780804759731.003.0004>
- Khamurduddin, Sk and Kalvakolanu, S. (2012). Role of micro, small and medium enterprises in women empowerment. 335–342. <https://doi.org/10.5281/zenodo.4448678>
- Khobarkar, V., Ingole, D. N., & Nage, G. V. (2016). Performance of self-help groups in micro finance. *Economic Affairs*, 61(4), 609.
- Khursheed, A., Khan, A. A., & Mustafa, F. (2021). Women's social empowerment and microfinance: A brief review of literature. *Journal of International Women's Studies*, 22(5), 249–265.
- Kondal, K. (2014). Women empowerment through self-help groups in Andhra Pradesh, India. *International Research Journal of Social Sciences*, 3(1), 13–17.
- Kudumbashree Mission report. (2022). <https://www.kudumbashree.org/>
- Mahmud, S., Shah, N. M., & Becker, S. (2012). Measurement of women's empowerment in rural Bangladesh. *World Development*, 40(3), 610–619.
- Malhotra, A., & Mather, M. (1997). Do schooling and work empower women in developing countries? Gender and domestic decisions in Sri Lanka. *Sociological Forum*, 12(4), 599–630.
- Mayoux, L. (2001). Tackling the down side: Social capital, women's empowerment and micro-finance in Cameroon. *Development and Change*, 32(3), 435–464. <https://doi.org/10.1111/1467-7660.00212>
- Muhammad, F., Bano, K., Muhammad, K., & Baig, T. (2021). Women empowerment in Pakistan: assessing the socio-economic determinants. *Studies of Applied Economics*, 39(3).
- Murugesan, G. (2014). Problems and prospects of women entrepreneurs in India. *Journal of Business Management and Social Sciences Research*, 3(11), 12–15.
- N.Amudha. (2010). A Study on Women Empowerment Through Self Help Groups in Salem District. 8(1707), 2010. <http://shodhganga.inflibnet.ac.in//handle/10603/17504>

- Nayak, A. K., & Panigrahi, P. K. (2020). Participation in Self-Help Groups and Empowerment of Women: A Structural Model Analysis. *The Journal of Developing Areas*, 54(1). <https://doi.org/10.1353/jda.2020.0001>
- Nichlavose, P. R., & Jose, J. (2017). Impact of SHG initiatives on socio-economic status of members. *Asian Journal of Research in Business Economics and Management*, 7(6), 209–216.
- OOMMEN, M. . A. . (2008). Micro finance and poverty alleviation: The case of Kerala's Kudumbashree, Working Paper. In Centre for Socio-economic & Environmental Studies(CSES) (Issue 17).
- Pharm, A., & Sritharan, R. (2013). Problems being faced by women entrepreneurs in rural areas. *The International Journal of Engineering and Science (Ijes)*, 2(3), 52–55.
- Pitt, M. M., Khandker, S. R., & Cartwright, J. (2006). Empowering women with micro finance: Evidence from Bangladesh. *Economic Development and Cultural Change*, 54(4), 791–831.
- Rajapriya, M. (2008). Role of self-help group women in value base emancipation. *Social Welfare*, 55(6).
- Sebastian, R., & P.K, M. (2020). Micro Enterprises and Women Empowerment : a Study With Reference To Kerala State in India. *An International Bilingual Peer Reviewed Refereed Research Journal*, 10(39), 165–173.
- Shireesha, E. (2019). Empowerment of Women through Self-Help Groups. *International Journal of Scientific Development and Research (IJS DR)*, 4(12), 13–16.
- Steiger, J. H. (2007). Understanding the limitations of global fit assessment in structural equation modeling. *Personality and Individual Differences*, 42(5), 893–898.
- Subbarayudu, C. and Rao, C. S. (2021). Policies and schemes for women entrepreneurs in India. *International Journal of Research and Analytical Reviews*, 8(1), 213–225.
- Sujisha, A. S. and Biju, T. (2019). Economic empowerment of women through micro enterprises promoted by Kudumbasree – a case study of Wayanad district. *International Journal of Research and Analysis Reviews*, 6(2), 199–213.
- Swain, R. B., & Wallentin, F. Y. (2009). Does microfinance empower women? Evidence from self-help groups in India. *International Review of Applied Economics*, 23(5), 541–556. <https://doi.org/10.1080/02692170903007540>
- Yadav, P. D., & Verma, A. (2015). Exploring the dimensions of women empowerment among microfinance beneficiaries in India: An empirical study in Delhi-NCR. *Journal of Applied Management and Investments*, 4(4), 260–270.
- Zimmerman, M. A. (1990). Toward a theory of learned hopefulness: A structural model analysis of participation and empowerment. *Journal of Research in Personality*, 24(1), 71–86. [https://doi.org/10.1016/0092-6566\(90\)90007-S](https://doi.org/10.1016/0092-6566(90)90007-S)